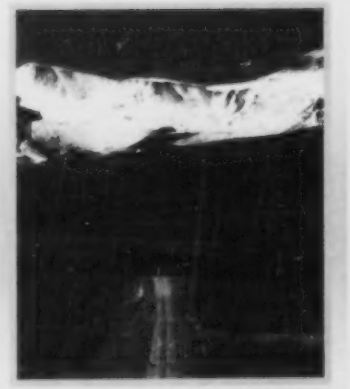
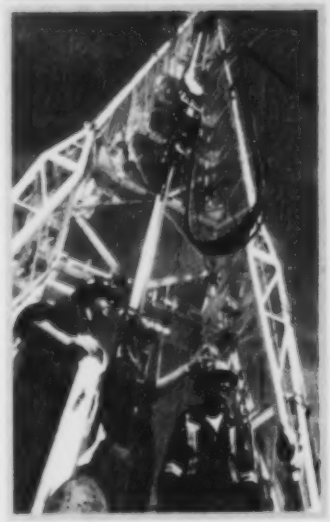
Corridors for Canada

An Investment in Canada's Economic Future





A Proposal for Funding Under the
Strategic Infrastructure Fund
Government of Canada

Submitted by the
Government of the Northwest Territories

Northwest
Territories

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May, 2002

Northwest
Territories

Message from the Premier

A strong, unified and self-reliant Northwest Territories is in the interest of all Canadians.

This vision, one that is shared by all NWT residents and the federal government is within reach, provided we all do our part in making it a reality. We must act now and be forward looking if we are to maximize the benefits to the Northwest Territories and Canada from the development of northern resources.

Oil and gas exploration and development, a Mackenzie Valley gas pipeline, expansion of the diamond-mining sector, hydro development and limitless opportunities in the tourism sector are all part of our potential. Development in these sectors will produce thousands of jobs, and training and business opportunities for Northerners, particularly its Aboriginal residents. Unlike 20 years ago, Aboriginal peoples are now full participants in the northern economy and are partnering with industry on numerous joint initiatives. Settled land-claims and the negotiation of self-government and land claim agreements in our unsettled regions, will not only contribute to a stable investment climate but will make sure that Aboriginal peoples obtain the benefits from developments on their land.

There is clearly a sense of optimism and hope for a prosperous future. Federal policies of the past and present have contributed to this positive environment.

However, the current optimism in the Northwest Territories is tempered by the realization that our existing underdeveloped transportation infrastructure is being stretched to the limit by the pressures of resource development. We need to partner with the federal government now to ensure that our transportation system can meet not only the demands of our booming economy but also improve the quality of life for our residents, many of whom currently lack year-round access to roads. Like other Canadians, all northern residents want development to make their lives better and provide a better future for their children.

This proposal titled **Corridors for Canada** lays out the elements of a partnership between the Northwest Territories and the federal government. It is ambitious and bold. It is strategic, in that it will better position the Northwest Territories and all of Canada to benefit from resource developments in the North. It is an *investment*, in that it will result in employment, royalties and taxation revenue for all Canada.

Corridors for Canada will achieve a vision of national and northern significance and leave a legacy of commitment to the North for all Canadians for many generations to come. The time is now to truly connect Canada from "coast to coast to coast."

Stephen Kakfwi
Premier

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Executive Summary

This proposal, titled **Corridors for Canada,** submitted for funding under the Government of Canada's Strategic Infrastructure Fund is put forward with the strong conviction that improving transportation corridors serving the enormous oil and gas and mineral reserves of the Northwest Territories will bring measurable and lasting economic and social benefits to the Northwest Territories and Canada.

Improving the North's infrastructure will not only support the non-renewable resource industry, it will facilitate the diversification of the Northwest Territories economy and improve the quality of life of its citizens who will gain better access to essential services, increased mobility and a lower cost of living. Like other Canadians, all northern residents want development to make their lives better and provide a better future for their children.

Corridors for Canada will help achieve a vision of national and northern significance and leave a legacy of commitment to the North for all Canadians for many generations to come. **Corridors for Canada** will also establish the final links of a Vision of Canada joined from coast to coast to coast.

The strategic investments proposed in **Corridors for Canada** will enable the Government of Northwest Territories (GNWT) and its Aboriginal partners to create an environment that attracts industry, manages development effectively, and maximizes the benefits from resource development, not just for northerners, but for all Canadians.

The GNWT's **Non-Renewable Resource Development Strategy for the Northwest Territories** is the impetus and substantiation for this proposal. Investing in improvements to strategic transportation corridors will help sustain the recent dramatic economic growth and productivity of the Northwest Territories and contribute to the long-term wealth of Canada.

Over the next 20 years, existing and proposed Northwest Territories diamond mines and oil and gas developments are expected to:

- **Contribute over $65 billion to the national GDP.**
- **Create over 270,000 person-years of employment across Canada.**
- **Generate some $17 billion in royalties and taxes to Canada, of which the vast majority flow to the federal government.**

This investment will also support the next great Canadian project, the Mackenzie Valley gas pipeline.

105-00454/

Road and Resource Corridors of the Northwest Territories

Road and Resource Corridors of the Northwest Territories

Legend

- Paved Highway
- Gravel Highway
- Winter Road
- Highway Ferry
- Highway Number

Recent economic modeling indicates that Southern Canada would capture approximately 60 percent of jobs and 85 percent of tax revenue resulting from Northwest Territories resource development.

Corridors for Canada meets the criteria for the Strategic Infrastructure Fund. This proposal is *strategic*, in that it will better position the Northwest Territories and all of Canada to benefit from resource developments in the North. This proposal is an *investment*, in that it will result in employment, royalties and taxation revenue. This proposal deals with *improving infrastructure*, in that it will expand service levels of existing transportation corridors to meet the demands of industry, and not just complete rehabilitation or maintenance activities.

Corridors for Canada calls for an investment of $200 million, of which the federal government is asked to contribute two-thirds, or $133 million. This investment is requested over a four-year period beginning in 2003/04. If funding becomes available work could begin in the fall of 2002/03. The GNWT views the $200 million cost and related projects as the bare minimum for sustaining natural resource development while meeting the needs of other users.

Industry also has a share in this proposal. While industry cannot be expected to fully fund improvements to the public highway system, industry must contribute to certain projects. In addition to the $200 million, it is proposed that Aboriginal and industry partners contribute a total of $43 million.

The cost-sharing arrangement is based on an investment formula that recognizes the need for strategic investment objectives as compared to a traditional per capita-based approach. It also recognizes the relative fiscal capacity of the GNWT to invest. The 20,000 taxpayers living in the Northwest Territories simply cannot make sufficient contributions that would allow for support of the proposed large-scale projects. Most importantly, it also recognizes that the majority of the benefits resulting from this investment will flow outside of the Northwest Territories.

The investment of $200 million will be used to improve all-weather and winter roads that serve existing and future oil and gas and mineral development in the Northwest Territories. These improvements will occur in the:

- **Mackenzie Valley Corridor, and the**
- **Slave Geologic Province Corridor**

Respective corridor projects, costs and investment timing, which would flow over a 4-year period 2003/04 to 2006/07, are shown in Table 1 and Table 2.

Table 1 Investment Needs (million $'s)

Project	Federal Funding	GNWT Funding	Total Government Funding	Third Party Funding	Total Projects
Mackenzie Valley Corridor					
1. Mackenzie Valley Winter Road Bridges	33	17	50	-	50
2. Dempster Highway (No. 8) Reconstruction	34	23	57	-	57
3. Inuvik Tuktoyaktuk Road Phase 1	5	4	9	6	15 (1)
Subtotal Mackenzie Corridor	**72**	**44**	**116**	**6**	**122**
Slave Geologic Province Corridor					
4. Deh Cho Bridge	20	3	23	37	60 (2)
5. Yellowknife Highway (No. 3) Reconstruction	17	8	25	-	25
6. Ingraham Trail (No. 4) Reconstruction	24	12	36	-	36
Subtotal Slave Corridor	**61**	**23**	**84**	**37**	**121**
Totals	**133**	**67**	**200**	**43**	**243**

Note: (1) Other funding to be obtained from DIAND Aboriginal Economic Development Fund and the Inuvialuit Regional Corporation
(2) Other funding to be obtained from local Aboriginal groups, DIAND, and from industry via tolls.

Table 2 Investment Timing (million $'s)

Project	2003/04	2004/05	2005/06	2006/07	Total
Mackenzie Valley Corridor					
1. Mackenzie Valley Winter Road Bridges	12.5	12.5	12.5	12.5	50.0
2. Dempster Highway (No. 8) Reconstruction	12.5	12.5	16.0	16.0	57.0
3. Inuvik Tuktoyaktuk Road Phase 1	4.5	4.5	-	-	9.0
Subtotal Mackenzie Corridor	**29.5**	**29.5**	**28.5**	**28.5**	**116.0**
Slave Geologic Province Corridor					
4. Deh Cho Bridge	11.5	11.5	-	-	23.0
5. Yellowknife Highway (No. 3) Reconstruction	12.5	12.5	-	-	25.0
6. Ingraham Trail (No. 4) Reconstruction	9.0	9.0	9.0	9.0	36.0
Subtotal Slave Corridor	**33.0**	**33.0**	**9.0**	**9.0**	**84.0**
Totals	**62.5**	**62.5**	**37.5**	**37.5**	**200.0**

Note: Total Program Funding $200 million
Third Party Funding $ 43 million
Total Project Funding $243 million

Executive Summary

Corridors for Canada will help the Northwest Territories become more self-reliant. It will also enable additional large-scale resource development to proceed, which in turn will create numerous opportunities for business and industry across Canada, such as the provision of pipe and other manufactured goods, supplies, support services and employment.

Without this investment, the benefits to the Northwest Territories and Canada will be reduced, and the risk will be increased of a transportation network that cannot efficiently or effectively service existing, let alone additional future oil and gas and mineral development.

There is an unprecedented opportunity today for the Northwest Territories to become Canada's first "have" territory. However, the GNWT cannot achieve this on its own. The support of the federal government in the proposed strategic investments in transportation infrastructure is essential. The GNWT's ability to invest in infrastructure is hampered by the fact that it receives no resource royalties and only minimal tax revenues.

The existing window of opportunity will not last forever. Aboriginal support for large-scale developments is contingent on long-term benefits to all communities, such as a vastly improved transportation network. The GNWT is determined to seize the opportunity that exists today and promote the development of northern petroleum and mineral resources, for the benefit of Northerners and all of Canada.

Support for **Corridors for Canada** will ensure that resource development in the Northwest Territories, and associated economic benefits, will continue for current and future generations of the Northwest Territories and Canada.

Corridors for Canada will achieve a vision of national and northern significance and leave a legacy of commitment to the North for all Canadians for many generations to come.

The Vision

The Northwest Territories, a land rich in people and resources, is unrivalled in potential and opportunities.

The Northwest Territories covers 1.2 million square kilometres, over 10 percent of the Canadian total. Within this vast area is a population of approximately 40,000 living in 34 communities, the largest being the capital, Yellowknife, with a population of 17,000. The population of the Northwest Territories is one-tenth of one percent of Canada's total population; 50 percent of this population is Aboriginal.

The 14th Legislative Assembly of the Northwest Territories has developed a Vision titled **Towards a Better Tomorrow** that describes a prosperous future that all Northerners and Canadians can share.

The over-arching vision statements from **Towards a Better Tomorrow** describe the future Northwest Territories as:

- **a unique Canadian jurisdiction that combines strong Aboriginal and public government;**
- **an environment which is the envy of the world;**
- **a strong and vibrant economy supporting the Northwest Territories and contributing to Canada;**
- **having the means to become a self-sufficient member of the Canadian federation.**

Other strategies that have been developed by the GNWT and/or other organizations that support this future vision of the Northwest Territories include;

- **A Non-Renewable Resource Development Strategy,** prepared by the GNWT, presents an action plan for government investment to seize the current non-renewable resource development opportunities;
- **Investing in Roads for People and the Economy**; prepared by the GNWT's Department of Transportation, presents an investment strategy for both existing and new roads;
- **Common Ground,** prepared by the Economic Strategy Panel, which consisted of representatives from all major economic-related organizations, presented a report that includes five recommendations for improving transportation infrastructure;
- **A Prime Strategic Investment Opportunity for All of Canada,** prepared by the Northwest Territories Business Coalition, a group consisting of all major Chambers and business organizations in the Northwest Territories, has recently traveled to Ottawa to lobby for increased federal investments in transportation infrastructure, as noted in their presentation.

Significant investment in transportation infrastructure is a key ingredient to realizing this vision and has been recognized as such in each of these strategy documents.

A strategic investment now in northern transportation corridors will create significant economic opportunities and benefits for both the Northwest Territories and for all of Canada. These opportunities and benefits will be remembered and enjoyed by Canadians for many generations to come.

"We can meet these challenges, in partnership with Canada and Aboriginal Governments. But to do so will require strategic investments – investments will enable the GNWT and its Aboriginal partners to create an environment that attracts industry, to manage development effectively, and to maximize the benefits of resource development not just for northerners, but for all Canadians"

Excerpt from "A Non-Renewable Resource Development Strategy for the Northwest Territories"

The Potential

The vision of the Northwest Territories is set against a back-drop of enormous non-renewable resource potential, along with incredible challenges to their development. Current non-renewable resource potential and the potential benefits are summarized in Table 3.

Table 3 –Existing and Possible Resource Development for the Northwest Territories

($ billions)

Commodity	Projected Resources	Gross Revenue	Federal Royalties	Federal Taxes	Northwest Territories Taxes
Existing Projects					
Natural Gas	1 Tcf	$2.7	$0.6	$0.5	$0.2
Oil	0.107 Billion bbls	$3.4	$0.8	$0.3	$0.1
Diamonds	173.2 milion carats	$23.9	$1.6	$3.0	$1.4
		$30.0	**$3.0**	**$3.8**	**$1.7**
New Projects					
Natural Gas	14.9 Tcf	$33.8	$6.1	$5.4	$2.5
Diamonds	41.9 million carats	$6.0	$0.5	$0.9	$0.4
		$39.8	**$6.6**	**$6.3**	**$2.9**
Possible Projects					
Natural Gas	47.4 Tcf	$107.5	$19.4	$17.5	$8.0
Oil	1.65 billion barrels	$39.4	$9.5	$7.6	$3.7
		$146.9	**$28.9**	**$25.1**	**$11.7**
Totals		**$216.7**	**$38.5**	**$35.2**	**$16.3** (1)

Note: (1) Northwest Territories taxes of $16.3 billion are prior to formula financing grant offset. Net revenue is approximately $3.5 billion as the GNWT only realizes 20% of the gross revenue.
Source: "A Non-Renewable Resource Development Strategy for the Northwest Territories."

Recent Gross Domestic Product (GDP) figures show the Northwest Territories had the highest economic growth on a constant dollar basis in 2001 at 20.8 percent. By comparison the average for Canada was only 1.2 percent. This is the second consecutive year that the Northwest Territories has led Canada in economic growth. This growth can be attributed mainly to the construction of the Diavik Diamond Mine, oil and gas exploration, and to exports of natural gas and diamonds.

The North American market for natural gas has experienced a surge in demand, increasing by 17 percent since 1990. Canadian exports to the United States have increased by 300 percent since 1985, and overall natural gas markets are expected to grow by another 40 percent over the next decade. The majority of electrical supply in the United States currently comes from fossil fuels. The obvious replacement to meet both the existing and new demand for electricity will be natural gas.

Oil & Gas

Overall, the Northwest Territories is expected to contain 60 to 70 trillion cubic feet of natural gas, with an estimated total value of over $140 billion.

A Mackenzie Valley natural gas pipeline could add as much as $57 billion to Canada's GDP and earn the federal government up to $24 billion in revenues through taxes and royalties.

Source ..University of Calgary study entitled "The Economic Benefits to Canada for the Development of Mackenzie Delta Gas Resources"

"Tapping new Canadian natural gas sources will increase our nation's security of supply, and support both national and international efforts to reduce greenhouse emissions by enabling U.S. and Canadian jurisdictions to replace coal and diesel-fired power sources with natural gas"

Excerpt from "A Non-Renewable Resource Development Strategy for the Northwest Territories"

Recent rights issuances have resulted in $782 million in work commitments in the Mackenzie Valley. Overall, it is expected that oil and gas companies will invest in excess of $1 billion in exploration projects alone over the next five years, exclusive of pipeline-related developments.

A proposal to ship natural gas from the Beaufort Delta via a pipeline following the Mackenzie Valley is actively being developed by a consortium of oil companies with proven reserves in the Beaufort Delta. In early January of this year, this group committed $250 million for the project definition stage of this pipeline.

Construction of this pipeline would not only provide access to the proven reserves of the Beaufort Delta, it would also open new regions of the Northwest Territories for exploration and development. The provision of improved transportation infrastructure would reduce costs and increase reliability, thus allowing Canadian-based junior and intermediate exploration companies the opportunity to participate.

A 2001 Conference Board of Canada report on potential development in the Slave Geologic Province estimated that 35% of GDP impacts, and 70% of employment impacts, would occur outside the Northwest Territories – primarily in British Columbia, Alberta, Ontario and Quebec.

Minerals

The Northwest Territories has a vast mineral potential, consistently ranked by mining companies surveyed by the Fraser Institute as one of the highest in North America.

By 2006, Canada can expect to have three diamond mines producing approximately 12 to 15 percent of the world's gem quality stones, or $1.5 billion annually, most of which will be exported. Initial indications are that the North American demand for Canadian diamonds is high. Increasing international concern over the politics of diamonds mined in western and southern Africa are likely to increase this demand.

Despite the recent downturn in commodity prices that has resulted in a slowdown in other mineral-related exploration and development, the Northwest Territories has enormous potential for many other types of mineral development such as gold, base metals and other precious metals. Our full potential has yet to be realized. An investment in transportation infrastructure would reduce the costs associated with exploring-for and developing these resources. Development of these resources will generate employment and supply opportunities throughout Canada.

Tourism

Tourism is one of the pillars of northern economic development. The North has some of Canada's most spectacular scenery; it is home to an abundance of exotic wildlife and birds, and a fascinating cultural heritage. To get there, people travel through or from southern provinces. Domestic and foreign tourists who use the highway and road system are an important part of tourism in the Northwest Territories.

While tourism is a rapidly expanding industry throughout the world, in the Northwest Territories the industry has been experiencing relatively low growth rates for the traditional summer season. Given the great natural heritage and abundant wilderness, opportunities for growth in the tourism sector are great. These opportunities would be enhanced through improved and expanded transportation infrastructure.

- **The tourism industry in the Northwest Territories is relatively small. In 2001/02 just under 33,000 people visited the Northwest Territories for leisure travel.**

Improvements to road transportation corridors in the Northwest Territories would also complement recent efforts by the federal government to market Canada as a safe, secure place for adventure travel.

Hydro

Preliminary studies indicate that the Northwest Territories has the potential to generate more hydro power than James Bay or Churchill Falls, using modern run-of-the-river technology that eliminates the need for large dams and massive flooding.

Improved transportation infrastructure will help in the development of future hydro projects.

The Need

All-weather or winter roads in the Northwest Territories public highway system are a vital link in the supply chain for non-renewable resource exploration, development and resupply. This link is subjected to winter freeze-up, spring break-up and other climatic influences that can affect the usability and function of the system itself.

The existing highway network serving these areas is under-developed, consisting of approximately 2200-kilometres of all-weather road, and 1450-kilometres of publicly constructed winter road. There are also numerous other privately constructed winter roads. Only one-third of the land area of the Northwest Territories is within 100 kilometres of an all-weather road.

The existing transportation system is under extreme pressure from recent industrial expansion. There are many geometric and surface deficiencies on the existing highway network. Increased industrial traffic exacerbates the safety-related problems associated with the poor geometrics and surface conditions.

At the same time the lack of land-based transportation infrastructure results in inefficiencies for existing developments, and increased uncertainty and costs in the exploration and development of new deposits. Other issues include:

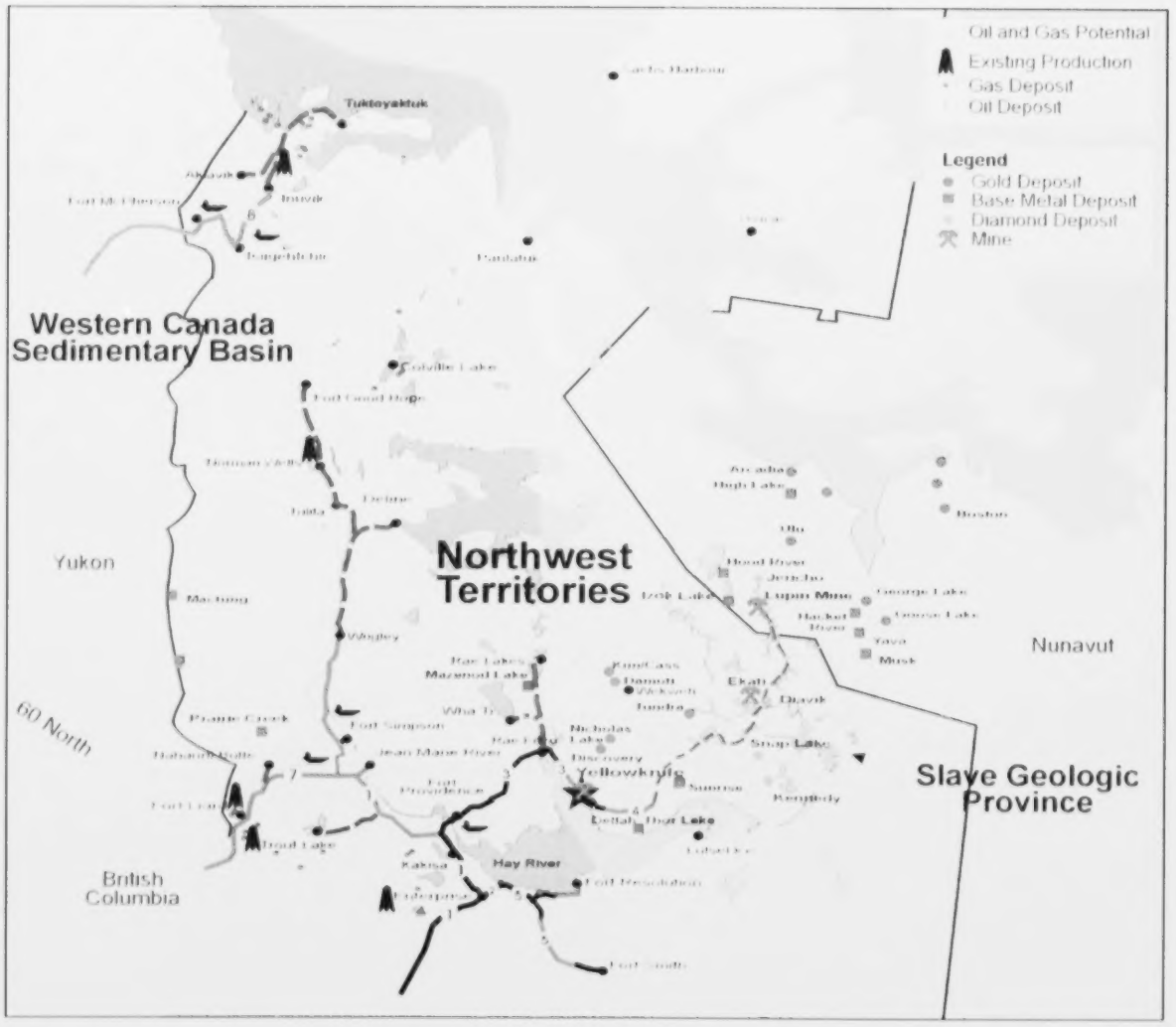
- **Geometric and surface deficiencies on the existing highway network that results in inefficiencies and safety-related problems.**

- **Traffic to both Yellowknife and the diamond mines utilize a seasonal ferry and/or ice bridge. This bottleneck restricts year-round access.**

- **The window of operation for existing winter roads needs to be expanded to facilitate exploration and development. The limited existing window makes exploration activities expensive and inefficient. The variable nature of the winter road season adds uncertainty to projects.**

Only one-third of the land area of the Northwest Territories is within 100 kilometres of an all-weather road.

Road and Resource Corridors of the Northwest Territories



The lack of effective and essential transportation infrastructure could eventually discourage future investment by companies that would otherwise be willing to pour billions of dollars into Canada's North, and subsequently the nation's coffers. A significant investment is needed to make the Northwest Territories highway system more efficient and effective.

To facilitate the development of these resources it is proposed to make strategic investments in two public highway corridors.

- **Mackenzie Valley Corridor, to facilitate the exploration and development of oil and gas deposits, along with the construction of the gas pipeline.**

- **Slave Geologic Province Corridor, to facilitate mineral-related activity into Yellowknife and beyond.**

The improvements proposed for these corridors do not complete the long-term needs for each corridor. These improvements will however, ensure that the existing public highway system can cope with current and more immediate short-term future needs.

Over the last 2 years, the GNWT has invested over $60 million in highway projects. Recognizing other infrastructure and social needs, this has stretched the fiscal capability of the GNWT.

It is noted that other federal programs with funding based on more traditional financing arrangements are meant only to ensure acceptable service levels for a population of 40, 000. They are not nearly sufficient for the GNWT to respond properly to the increasing demands placed on it by rapid industrial growth, particularly with regard to physical infrastructure.

The NWT's rudimentary transportation and municipal capacity is being overwhelmed by world-class industrial development with which some 19,000 taxpayers cannot realistically cope – thus endangering a lucrative strategic investment opportunity for the entire country.

Excerpt from " A Prime Strategic Investment Opportunity for All of Canada" prepared by NWT Business Coalition

The Benefits

All of Canada has a strategic interest in better connecting its vast northern territories with the rest of the country, and in underlining its sovereignty in this region through a physical presence that can only be achieved with adequate transportation infrastructure.

Significant expenditures in this area will yield even larger financial returns by making current non-renewable resource development sustainable in the long term.

Benefits from these developments flow to Canada, the GNWT, Aboriginal governments and industry itself.

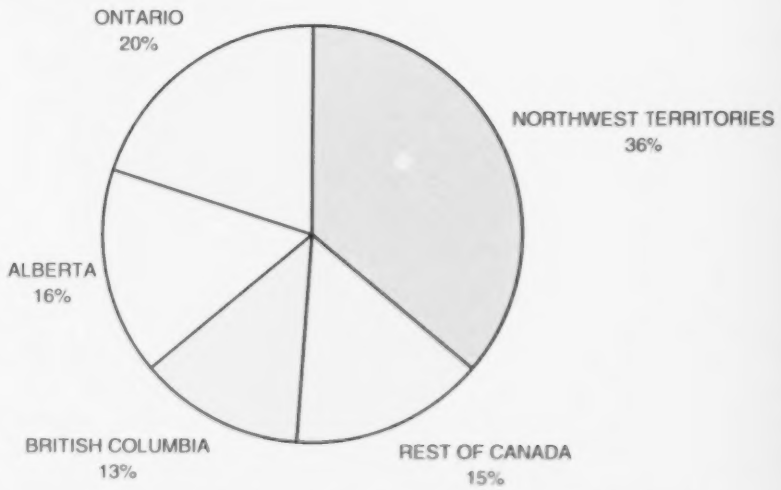
Benefits to Canada

Canada collects and will continue to retain 100 percent of royalties and most of the taxes flowing from Northwest Territories developments, until land claims are concluded and resource revenue sharing agreements are reached.

Increased development activity will result in increased revenue flows to Canada, through royalties and taxes. Much of the increased employment impacts will occur outside of the Northwest Territories.

Recent economic modeling indicates that **Southern Canada would capture approximately 60 percent of jobs and 85 percent of the tax revenues resulting from Northwest Territories resource development.**

Table 4 - Employment



Employment Projections are based on three diamond mines and the Mackenzie Valley pipeline as presented in "A Prime Strategic Investment Opportunity for All of Canada" published by the NWT Business Coalition.

Table 5

Three Diamond Mines - Production Value of $23.8 billion

Impacts	Northwest Territories	Canada
GDP	$21.4 billion	$4.3 billion
Employment (person-years)	61,472	63,056
Royalties/Taxes	$260 million	$7.2 billion

Source: Slave Geologic Province Transportation and Economic Development, Conference Board of Canada, April 2001.
Note: Impacts are direct, indirect and induced.

Table 6

Mackenzie Pipeline and Beaufort Production - Production Value of $36.3 billion

Impacts	Northwest Territories	Canada
GDP	$33.9 billion	$6.3 billion
Employment (person-years)	72,435	84,780
Royalties/Taxes	$549 million	$11.6 billion

Source: Economic Impacts of Mackenzie Delta Fields and Pipeline Development, University of Calgary, 2002.
Note: Impacts are direct and indirect

Over the next 20 years, existing and proposed Northwest Territories diamond mines and petroleum developments are expected to generate the following impacts:

- Contribute over $65 billion to the national GDP.
- Create over 270,000 person-years of employment across Canada.
- Generate some $17 billion in royalties and taxes to Canada.

Benefits to the Northwest Territories

Over the next 30 years, the development of Mackenzie/Delta natural gas and additional mineral development will bring the Northwest Territories into Canadian economic mainstream and contribute to our vision of becoming Canada's first "have" territory. Other notable benefits include:

- **A Mackenzie Valley natural gas pipeline would fuel the Northwest Territories economy with $3.9 billion in labour income or more than 72,000 jobs.**

- **Three diamond mines will contribute over $21 billion to the Northwest Territories economy.**

More economic activity means more taxation revenue for the GNWT. However, it is noted that this increased revenue is offset by a reduction in federal transfer payments. In fact, it is in the interest of the federal government to invest since they derive the majority of the tax and royalty benefits.

Improving the North's infrastructure will not only support the non-renewable resource industry, it will facilitate the diversification of the Northwest Territories economy and improve the quality of life of its citizens who will gain better access to essential services, increased mobility and a lower cost of living. Like other Canadians, all northern residents want development to make their lives better and provide a better future for their children.

Benefits to Aboriginal People

Unlike in the 1970's, Aboriginal people in the Northwest Territories are now partners in the political and economic development of the North and their support is pivotal. Aboriginal support for large-scale developments is contingent on long-term benefits to all communities, such as a vastly improved transportation network.

Aboriginal governments will benefit from resource development through increased business and employment opportunities for Aboriginal Development Corporations. Proof of this, is demonstrated by the recently formed Aboriginal Pipeline Group which was formed to maximize ownership and benefits of a Mackenzie Valley pipeline.

"Like other Canadians, Aboriginal people in the Northwest Territories want development to improve their quality of life and provide a better future for their children"

.....Excerpt from Premier's speaking notes – Annual Dinner of the Canadian Association of Petroleum Producers, April 18, 2002

Benefits to Industry

Accessibility of transportation infrastructure is important in all phases of an oil and gas or mining project, from initial grassroots exploration through to operations.

Known deposits in the Northwest Territories are remote and lack transportation infrastructure that developments in southern Canada and much of the rest of the world enjoy. The lack of infrastructure also increases the cost of exploration programs. To overcome this deficit, deposits must be larger and higher in grade to be considered for development compared to other regions with improved transportation access.

Accessibility to good transportation can result in:

- **easier project planning,**
- **reductions in initial capital construction, and ongoing operating costs,**
- **reduction in project risks and respective investment uncertainty,**
- **reduction in environmental impacts due to defined travel corridors.**

Excerpt from letter sent from Diavik Diamond Mine to the Honourable David Collenette, Minister of Transport

The Plan

Corridors for Canada calls for a total investment of $200 million, of which the federal government is asked to contribute 66 percent or $133 million over 4 years, beginning in 2003/04. If funding becomes available work could begin in the fall of 2002/03. Industry will also be contributing additional funds to proposed projects.

Investments in strategic road projects are proposed in both the Mackenzie Valley Corridor, and the Slave Geologic Province Corridor. These projects are for improvements to the existing public highway system. It is proposed that selected highway sections within each corridor be improved to service/accommodate the increasing demands/strains being placed on them now and in the future by industry. The specifics of our proposed improvements for each corridor are detailed in the following corridor/project description sheets. The respective investment needs are detailed in Tables 1 and 2.

Table 1 Investment Needs (million $'s)

Project	Federal Funding	GNWT Funding	Total Government Funding	Third Party Funding	Total Projects
Mackenzie Valley Corridor					
1. Mackenzie Valley Winter Road Bridges	33	17	50	-	50
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Note: (1) Other funding to be obtained from DIAND Aboriginal Economic Development Fund and the Inuvialuit Regional Corporation
(2) Other funding to be obtained from local Aboriginal groups, DIAND, and from industry via tolls.

Table 2 Investment Timing (million $'s)

Project	2003/04	2004/05	2005/06	2006/07	Total
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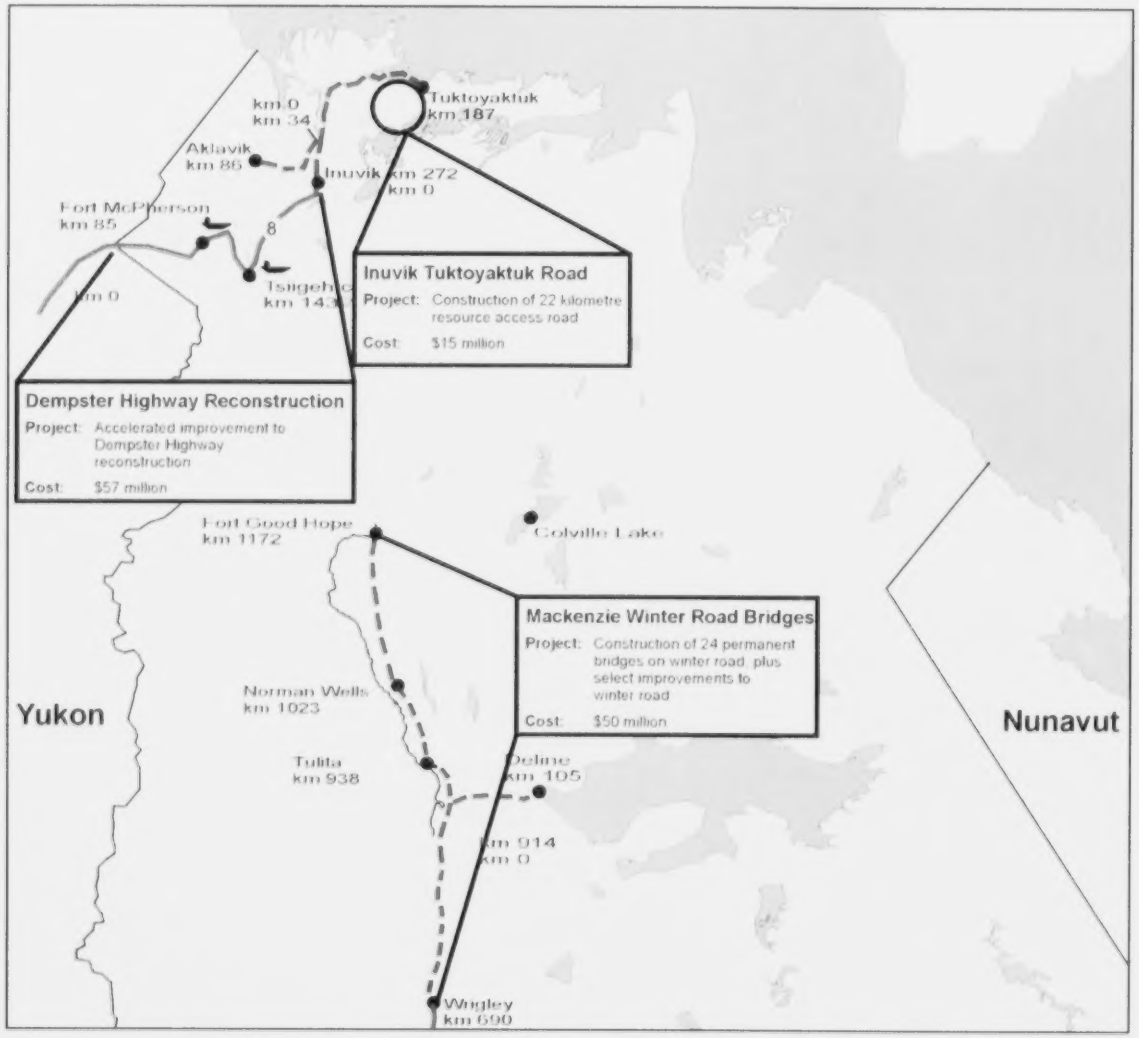
2. Dempster Highway (No. 8) Reconstruction	12.5	12.5	16.0	16.0	57.0
3. Inuvik Tuktoyaktuk Road Phase 1	4.5	4.5	-	-	9.0
Subtotal Mackenzie Corridor	**29.5**	**29.5**	**28.5**	**28.5**	**116.0**
Slave Geologic Province Corridor					
4. Deh Cho Bridge	11.5	11.5	-	-	23.0
5. Yellowknife Highway (No. 3) Reconstruction	12.5	12.5	-	-	25.0
6. Ingraham Trail (No. 4) Reconstruction	9.0	9.0	9.0	9.0	36.0
Subtotal Slave Corridor	**33.0**	**33.0**	**9.0**	**9.0**	**84.0**
Totals	**62.5**	**62.5**	**37.5**	**37.5**	**200.0**

Note: Total Program Funding $200 million
Third Party Funding $ 43 million
Total Project Funding $243 million

Mackenzie Valley Corridor



Investment Needs:
Mackenzie Valley Corridor

Legend

- Paved Highway
- Gravel Highway
- Winter Road
- Highway Ferry
- Highway Number

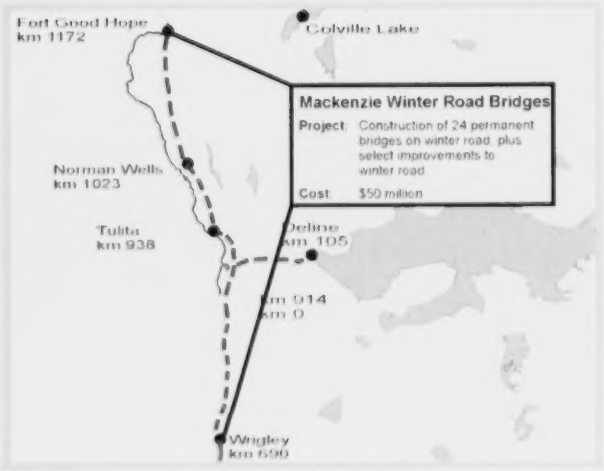
Corridor: Mackenzie Valley
Project: Mackenzie Winter Road Bridges

Project Description

- Construction of permanent structures at 22 stream crossings.
- Construction of permanent bridges at the Bear and Blackwater Rivers.
- Realignment of the winter road between Norman Wells and Fort Good Hope to the proposed all-weather road alignment.

Background

- The Northwest Territories Department of Transportation annually constructs a 482-kilometre winter road from Wrigley to Fort Good Hope. This winter road facilitates community resupply and intercommunity travel for Mackenzie Valley communities.
- The winter road is used for oil and gas exploration activities occurring in the Mackenzie Valley. However, the current window of operation is limited. This results in higher expenditures on transportation and logistics, and less on actual exploration activities.
- The Department of Transportation has recently completed the construction of seven permanent bridges on the winter road, in partnership with DIAND, as a regional and Aboriginal economic development initiative. Construction of these bridges is expected to expand the window of operation for the winter road, facilitating oil and gas exploration activities and community resupply and travel.
- The Department of Transportation has recently completed pre-engineering studies for an additional 22 stream/river crossings along the Mackenzie Valley winter road. In addition, major river crossings are required at the Bear and Blackwater Rivers. Construction of these bridges would further expand the winter road window of operation and reduce environmental concerns at stream crossings.



- The winter road alignment between Norman Wells and Fort Good Hope needs to be realigned to the proposed all-weather road alignment. This will ensure that the permanent bridges constructed can be utilized for a future all-weather road.

- The winter road would be used extensively for the construction of a Mackenzie Valley pipeline. Construction of this pipeline would be undertaken over two, four-month winter seasons.

Benefits

- A bridge program would create significant local employment and business opportunities for aboriginal persons and companies.

- Once constructed, the bridges would enhance intercommunity travel, increase access to services and reduce consumer prices.

- All crossings are located on the all-weather road alignment.

- An expanded winter road window would facilitate oil and gas exploration and potential development activities, as well as facilitating pipeline construction.

Proposed Expenditures

- The total cost to construct permanent stream crossings at 22 locations, plus major bridge structures at the Bear and Blackwater Rivers, plus realigning the winter road from Norman Wells to Fort Good Hope is $50 million.

- Construction would proceed over a four year period (2003/04 to 2006/07).

Investment Timing (million $'s)				
Mackenzie Valley Winter Road Bridges				
2003/04	2004/05	2005/06	2006/07	Total (million $'s)
12.5	12.5	12.5	12.5	50.0

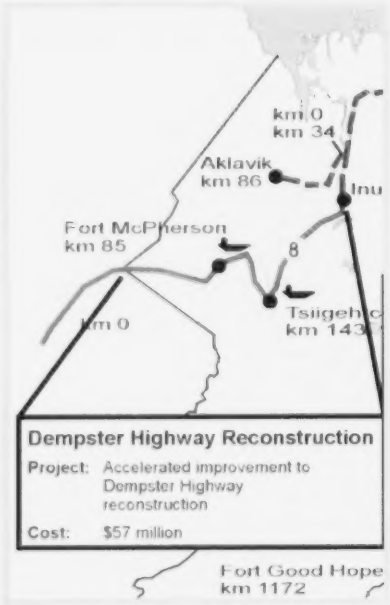
Corridor: Mackenzie Valley
Project: Dempster Highway (No.8) Reconstruction

Project Description

- Reconstruction of selected sections of the Dempster Highway from the Northwest Territories/Yukon border to Inuvik.

Background

- The Dempster Highway extends 259 kilometres from the Northwest Territories/Yukon Border to Inuvik.
- This highway provides surface access to Inuvik and the Beaufort Delta region.
- The highway is used by the oil and gas industry in the Beaufort Delta.
- The Northwest Territories Department of Transportation has a modest program for reconstruction of this highway. However, due to limited budgets and other priorities funding is limited.
- Reconstruction would involve straightening and widening the road to improve road geometrics, along with the correction of drainage and permafrost problems.



Benefits

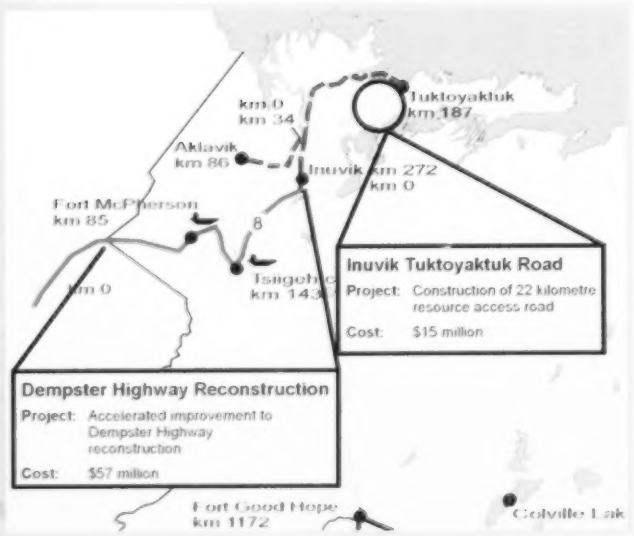
- Oil and gas companies currently exploring in the Beaufort Delta region would benefit from improved road conditions.
- The reconstruction of this highway will improve the certainty and level of service for this vital link in the oil and gas supply chain.
- Vehicle operating costs, for both private and commercial users, will be reduced through improved surface conditions and improved roadway geometrics.
- Safety will be improved through improved geometrics and improved surface conditions.
- A reconstructed highway would attract more tourists to the region, particularly from the Alaska Highway.
- Local training and employment opportunities, and contracting opportunities for aboriginal companies are provided through road construction.

Investment Plan

- Construction is estimated to cost $57 million and would occur over a four-year period beginning in 2003/04.

Investment Timing (million $'s)				
Dempster Highway (No. 8) Reconstruction				
2003/04	2004/05	2005/06	2006/07	Total (million $'s)
12.5	12.5	16.0	16.0	57.0

Corridor: Mackenzie Valley
Project: Inuvik Tuktoyaktuk Road Phase 1



Project Description

- Construction of a 22-kilometre access road from Tuktoyaktuk south to area gas deposits and gravel sources as the first phase of a road from Inuvik to Tuktoyaktuk.

Background

- At present, the Department of Transportation annually constructs a 187-kilometre ice road from Inuvik to Tuktoyaktuk.

- Construction of an all-weather road to the Arctic Ocean at Tuktoyaktuk has been considered as far back as the 1960's by the Federal Government. Since that time the Federal Government has undertaken a number of studies on this road. This includes detailed road alignment, environmental data gathering and engineering design.

- More recently, the Northwest Territories Department of Transportation has undertaken the Highway Strategy Initiative. Part of this initiative involved updating the engineering, economic, environmental and land issues associated with the Inuvik Tuktoyaktuk Road.

- A road from Inuvik to Tuktoyaktuk is a long-term objective of the Department of Transportation, as noted in the recently released vision document **Investing in Roads for People and the Economy: A Highway Strategy for the Northwest Territories.** This road was also noted as a priority in the GNWT's **Non-Renewable Resource Development Strategy.**

- The Northwest Territories Department of Transportation has recently submitted a 15 million dollar proposal for funding the construction of a 22-kilometre gravel access road south from Tuktoyaktuk under DIAND's Aboriginal Economic Development Fund. The proposal would be cost shared between DIAND, the GNWT and the Inuvialuit Regional Corporation. This project has been approved by DIAND, pending the identification of an additional $5 million.

- Devon Energy Corporation and Petro-Canada have recently announced a significant natural gas discovery near the end of the proposed gravel access road (Tuk M-18 well).

Benefits

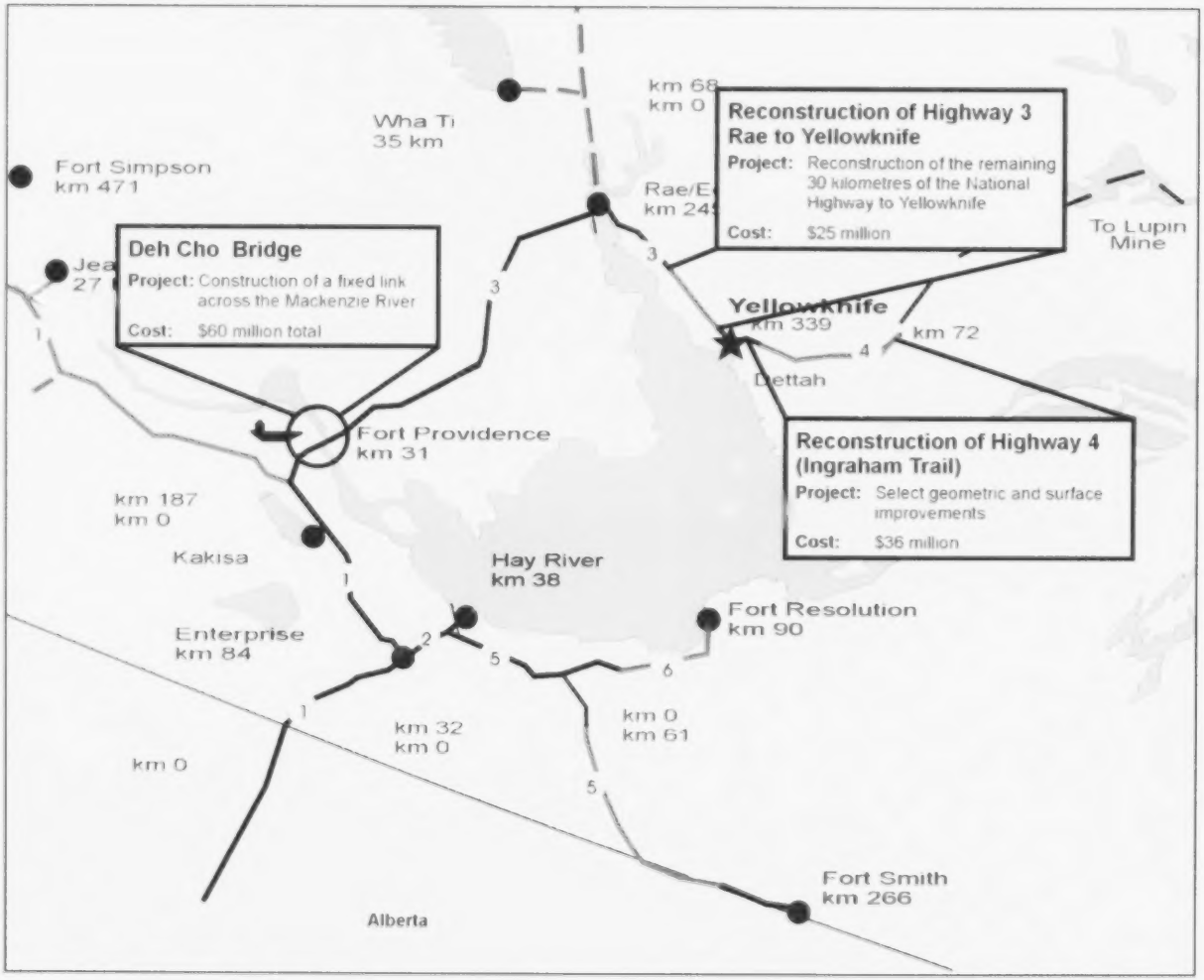
- The construction of this road would provide considerable local and Aboriginal training and employment opportunities during construction. Local contractors could undertake this work.
- The road from Inuvik to Tuktoyaktuk has high potential for tourism development. It would be the only link in Canada to the Beaufort Sea/Arctic Ocean and would connect the country from 'coast to coast to coast'.
- The road would facilitate exploration and development of oil and gas reserves in the region.
- Construction of the proposed access road would facilitate further exploration and future development in the area.
- The access road would provide the community of Tuktoyaktuk and industry with a year-round access to gravel.

Investment Plan

- The total cost to construct a road from Inuvik to Tuktoyaktuk is $100 million.
- The cost to construct the 22-kilometre access road from Tuktoyaktuk to the gravel source, phase 1 of the Inuvik to Tuktoyaktuk road, is $15 million.
- Construction could proceed over two years beginning in 2003/04.

Investment Timing (million $'s)				
Inuvik Tuktoyaktuk Road Phase 1				
2003/04	2004/05	2005/06	2006/07	Total (million $'s)
4.5	4.5	-	-	9.0

Slave Geological Province Corridor



Investment Needs:
Slave Geologic Province Corridor

Legend

- Paved Highway
- Gravel Highway
- Winter Road
- Highway Ferry
- Highway Number

Corridor: Slave Geologic Province
Project: Deh Cho Bridge

Project Description

- Construction of a permanent bridge, 980 metres long, across the Mackenzie River near Fort Providence. This bridge would be part of the National Highway System.

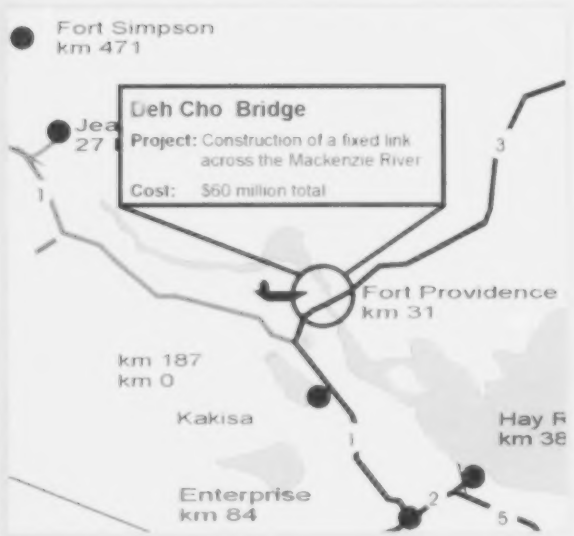
Background

- The designated National Highway System in the Northwest Territories is 560 kilometres long, and stretches from the Alberta border to Hay River and Yellowknife. The highway to Yellowknife crosses the Mackenzie River near the community of Fort Providence. Crossing the Mackenzie River is presently facilitated by a ferry operation in the summer, and an ice bridge in the winter. There are seasonal disruptions to this service for 3 to 4 weeks during spring break-up, and several days to a week in the fall during freeze-up.

- The GNWT has considered this bridge to be a need, but cannot afford the large capital investment given its limited budget and other priority needs.

- The Mackenzie River crossing is the only part of the National Highway System across Canada that experiences a disruption in service.

- A group representing the local Aboriginal organizations, called the Fort Providence Combined Council Alliance, has submitted a proposal to the GNWT to privately construct and operate a bridge under a public-private partnership arrangement.



Benefits

- There would be direct cost savings on the suspension of ferry/ice bridge operations.
- Business and consumers would benefit through elimination of the ferry/ice bridge through elimination in service disruptions, reduced waiting times, and reduced inventory costs.
- Improved access and reduced costs would stimulate investment and there would be increased income from development of the economy.
- Aboriginal groups would benefit from involvement in business development.
- There would be social benefits, resulting from reduced isolation and uncertainty of access and improved level of service.
- The construction of the bridge would provide considerable training and employment opportunities during construction.

Investment Plan

- The current estimate for construction of this bridge is $60 million.
- Under the current proposal, the bridge would be constructed and operated under a public private partnership. An initial investment by Governments would be required.
- Debt service and operation and maintenance costs would be serviced through the cost savings to government associated with the elimination of the ferry/ice bridge operations, and through the implementation of a toll for bridge users.
- Construction could be undertaken over a two-year period beginning in 2003/04.

Investment Timing (million $'s)				
Deh Cho Bridge				
2003/04	2004/05	2005/06	2006/07	Total (million $'s)
11.5	11.5	-	-	23

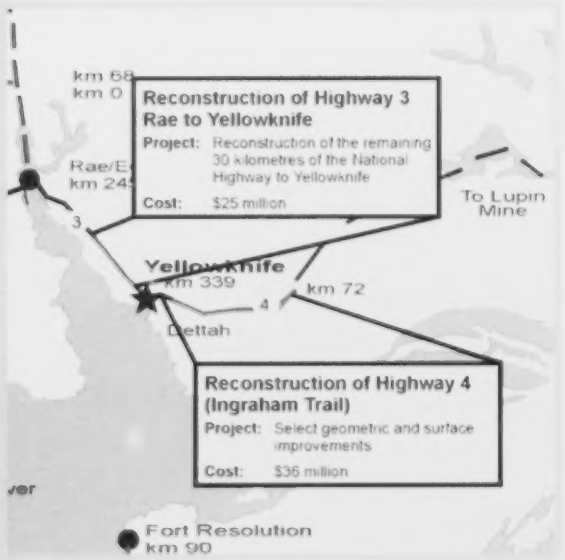
Corridor: Slave Geologic Province
Project: Yellowknife Highway (No.3) Reconstruction

Project Description

- Reconstruction and paving of 30 kilometres of the Yellowknife Highway between Rae and Yellowknife.

Background

- The Yellowknife Highway, which is part of the National Highway System, connects Yellowknife to points south.
- This highway is also utilized by the mining industry to resupply the mines in the Slave Geologic Province.
- The Yellowknife Highway was originally constructed in the late 1950s and early 1960s. The section from Rae to Yellowknife was opened to the public in the 1960s.
- The Northwest Territories' highest priority for capital funding is the reconstruction and paving of this section of highway. This section of highway has the highest traffic volumes on the Northwest Territories intercommunity highways.
- While considerable progress has been made in reconstruction of this road, at the end of this fiscal year a 30-kilometre section of road remains to be reconstructed.
- The unreconstructed section of road is sub-standard in width, lacks adequate site distances at many locations due to the excessive number of curves, and, because it is built over saturated silts and muskegs, has little or no natural bearing strength or load carrying capacity. This is the only unpaved (i.e. gravel) section of the National Highway System.
- The reconstruction and paving program, which involves straightening and widening the road, correcting drainage problems, constructing a new road base and applying an asphaltic surface started in 1999 on this section of road.
- Funding received under the federal governments Strategic Highway Infrastructure Program (SHIP) is being directed to accelerate the reconstruction of this section of road.



Benefits

- The reconstruction and paving of this section will increase economic efficiency through improved reliability and operating performance.
- Vehicle operating costs, for both private and commercial users, will be reduced through improved surface conditions, shortened distances achieved through straightening of the section, and improved roadway geometrics.
- Safety will be improved through improved geometrics and improved surface conditions.
- Tourism opportunities would be enhanced since the entire highway to Yellowknife would be paved and constructed to geometric standards.
- Local training and employment opportunities are provided through road construction.

Investment Plan

- Construction of the remaining 30 kilometres is estimated to cost $25 million and would be undertaken over a two-year period beginning in 2003/04.

Investment Timing (million $'s)				
Yellowknife Highway (No. 3) Reconstruction				
2003/04	2004/05	2005/06	2006/07	Total (million $'s)
12.5	12.5	-	-	25

Corridor: Slave Geologic Province
Project: Ingraham Trail (Highway No.4) Reconstruction

Project Description

- Reconstruction, paving and geometric improvements along the Ingraham Trail.

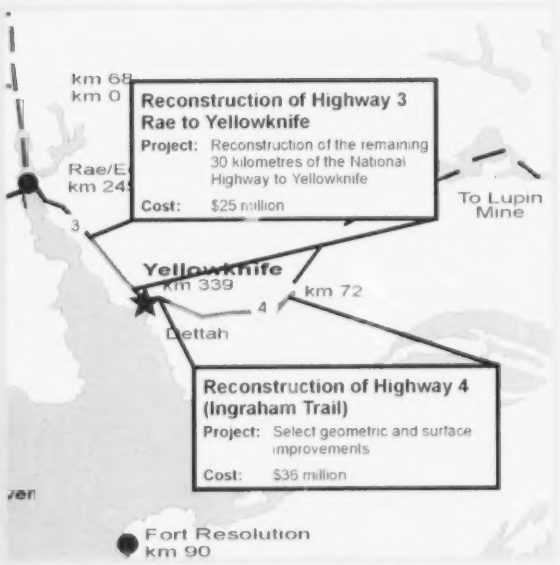
Background

- The 69-kilometre long Ingraham Trail (also referred to as Highway 4) begins near Yellowknife at the intersection with Highway 3 and terminates at Tibbit Lake. This highway provides access to local mines (Giant), the community of Dettah, permanent and recreational residents along its route, recreational areas, and the winter road servicing mine sites north of Yellowknife for annual resupply.

- The Ingraham Trail does not meet current highway geometric standards for its use. Road width, horizontal and vertical curvature and sight distance conditions require reduced speed limits and limit passing opportunities. Geometrically, it is the worst highway within the Northwest Territories, and maximum speed limits are posted at 70 km/h.

- Commercial trucking activities on this road have increased dramatically over the past several years, due to the development of diamond mines in the Slave Geologic Province. Over 8000 truckloads of freight (16,000 truck trips annually) traveled over this road for the past two years. It is expected that these volumes will remain high in the foreseeable future.

- The increased truck traffic creates safety concerns as they mix with other light vehicles on a road with poor surface and geometric conditions.



Benefits

- The reconstruction and paving of this section will increase economic efficiency through improved reliability and operating performance of the trucking industry. This will be a direct benefit to the mining industry.
- The Ingraham Trail is used extensively by tourists. Tourism opportunities would be enhanced through the provision of a safer road with an improved surface.
- Safety would be greatly enhanced through improved geometric and surface improvements.

Investment Plan

- Construction is estimated to cost $36 million and would occur over a four-year period beginning in 2003/04.

Investment Timing (million $'s)				
Ingraham Trail (No.4) Reconstruction				
2003/04	2004/05	2005/06	2006/07	Total (million $'s)
9	9	9	9	36

Conclusion

The Northwest Territories is a land rich in people and resources, unrivalled in potential and opportunities. The potential is just beginning to be realized.

Corridors for Canada is ambitious and bold. This proposal details a total required investment in transportation infrastructure of $200 million, of which $133 million is being sought from the Strategic Infrastructure Fund.

The investment would be used to improve selected road and highway elements in two transportation corridors; the Mackenzie Valley Corridor and the Slave Geologic Province/Yellowknife Corridor.

This investment will return significant benefits to Canada, the Government of the Northwest Territories, Aboriginal Groups and Industry.

There is an unprecedented opportunity today for the Northwest Territories to become Canada's first "have" territory. But the GNWT cannot do it on its own.

The support of the federal government in the proposed strategic investments in transportation infrastructure is essential to help the GNWT make needed investments now.

The window of opportunity will not last forever. Twenty-five years ago excitement about northern resource potential waned due to lack of political support. The Government of the Northwest Territories is determined to seize the opportunity that exists today and promote the development of petroleum and mineral resources, for the benefit of the Northwest Territories residents and all Canadians. **Corridors for Canada** provides this opportunity.